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EXAMINER	
STORK, KYLE R	

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/747,830	TEWARI, SOURABH	
	Examiner	Art Unit	
	Kyle R Stork	2178	

-- Th MAILING DATE of this communication appears on the cover she t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-18* is/are rejected.

7)☒ Claim(s) *2-3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 28 October 2004.

2. In the amendment, claims 1-18 are pending. Claims 1, 14, 15, 16, 17, and 18 are independent claims. The rejection of claims 2 and 3 under 35 U.S.C. 102(e) as being unpatentable over Alam et al. (US 6336124); the rejection of claims 5 and 11 under 35 U.S.C. 103(a) as being unpatentable over Alam et al.; and the rejection of claims 8, 14, and 17 under 35 U.S.C. 103(a) as being unpatentable over the previous combinations of Alam et al. and Adobe Creative Team have been withdrawn as necessitated by the amendment.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 6-7, 9-10, 15-16, and 18 remain rejected under 35 U.S.C. 102(e) as being anticipated by Alam et al. (US 6336124, filing 1999, publication 2002). Further, claims 5 and 11 are also rejected under 35 U.S.C. 102(e) as being anticipated by Alam based upon the applicant's amendments.

As per independent claim 1 Alam discloses a computer-implemented method for processing an electronic document comprising:

- Obtaining a first electronic document including a plurality of logical elements, each logical element having associated content with a visual appearance (Figure 3, step 302; Figure 6, items 510 and 518; column 5, lines 10-15; claim 1: Here, the document is received for processing. In Figure 6, items 510 and 518 are first documents)
- Modifying the first electronic document by associating a respective marker attribute value with a marker attribute of each of the logical elements in the first electronic document, each respective marker attribute value being a value of the marker attribute of the content of the logical element (column 6, lines 54-61; Figure 6, item 530: Here, the intermediate format document is a modified first electronic document with associated values)
- Generating a second electronic document by converting the modified first electronic document with the associating marker attribute values through a document conversion process that preserves the association of the marker attribute values and the content of the logical elements (column 6, lines 54-61 and claim 1; Figure 6, item 534: Here, the output format document contains the same logical elements and layout as the first electronic document, items 510 and 518)
- Using the marker attribute values to identify logical elements in the second electronic document (column 6, lines 54-61 and claim 1)

As per dependent claim 4 Alam discloses the method wherein each of the logical elements in the second electronic document a corresponding logical element in the first electronic document (Figures 3, 4, 11, and 12; column 13, lines 15-19).

As per dependent claim 5, Alam discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Alam fails to specifically disclose the conversion process as a "print" process. However, conversion from a first format electronic document to a PDF is well known in the art as a "print" process (Applicant Arguments page 012: "The examiner further asserts, and correctly, that converting to a PDF document is well known as a type of print process"). Alam further discloses that the output format document (Figure 6, item 534) can be a PDF document (column 5, lines 28-34 and claim 4). Therefore, Alam inherently contains a print processes.

As per dependent claim 6 Alam discloses the method wherein generating a second electronic document comprises associating a different marker attribute values with content of each of the plurality of logical elements in the first electronic document (column 7, lines 5-9: Here an intermediate format block is a logical element from the modified first document).

As per dependent claim 7 Alam discloses the method wherein generating a second electronic document comprises associating a different marker attribute value with content of each logical element located within one same page of the first electronic document (Figures 20 and 21 A-F; column 19, lines 37-44).

As per dependent claim 9 Alam discloses the method wherein the first electronic document is an electronic document generated in a word processing application

(column 2, lines 28-36 and claim 4; Figure 6, item 516 and 518: Here, item 516 is the word processing application and 518 is the first electronic document).

As per dependent claim 10 Alam discloses the method wherein the second electronic document is a PDF document (column 5, lines 28-34 and claim 4).

As per dependent claim 11 Alam discloses the method wherein:

- Each logical element has a logical type, the logical type comprising at least one of a header, a paragraph, a text box, a list element, a table cell, or an image (column 7, lines 5-9)
- Using the marker attribute values to identify logical elements in the second electronic document comprises:
    - Identifying the logical elements in the second electronic document by converting the marker attribute values to logical types (column 13, lines 15-25: Here, the logical elements and logical types are mapped to the corresponding positions in the output format document (Figure 6, item 534))

As per independent claim 15 Alam discloses a computer-implemented method for creating a final-format document from a source document generated by a computer application, the method comprising:

- Obtaining a source document that includes a plurality of logical elements, each having associated content with visual appearance (Figure 6, items 510 and 518)

- Obtaining an original final-format document from the computer application, the original final format document being generated from the source document (Figure 6, item 534)
- Marking logical elements of the source document by marking the respective associated content of the logical elements to generate a marked source document (column 6, lines 54-61 and claim 1)
- Obtaining a marked final-format document from the computer application, the marked final-format document being generated from the marked source document (Figure 6, item 534; column 5, lines 28-34; claim 1)
- Obtaining logical structure information from the source application (Figure 6)
- Creating logical elements in the original final-formatted document using the obtained logical structure information and the marked final-format document (Figure 6, item 530 and 534; Figure 7; Figure 3)

As per independent claim 16 Alam discloses a computer program product, stored on a machine-readable medium, comprising instruction operable to cause a programmable processor to:

- Obtain a first electronic document containing a plurality of logical elements, each logical element having associated content with a visual appearance (Figure 3, step 302; column 5, lines 10-15; claim 16)
- Modifying the first electronic document by associating a respective marker attribute value with a marker attribute of each of the logical elements in the first electronic document, each respective marker attribute value being a value of the

marker attribute of the content of the respective logical element (column 6, lines 54-61 and claim 1)

- Generate a second electronic document by converting the modified first document with the associated marker attribute values through a document conversion process that preserves the association of the marker attribute values and the content of the logical elements (column 6, lines 54-61 and claim 16)
- Using the marker attribute values of the content in the second electronic document to identify each of the plurality of logical elements in the second electronic document (column 6, 54-61 and claim 16)

As per claim 18 Alam discloses a computer program product stored on a machine-readable medium, comprising instructions operable to cause a programmable processor to:

- Obtain a source document generated by a computer application, the source document including a plurality of logical elements, each having associated content with visual appearance (Figure 6, items 510 and 518)
- Obtaining an original final-format document from the computer application, the original final-final format document being generated from the source document (Figure 6, item 626)
- Mark logical elements of the source document to produce a marked source document (column 6, lines 54-61 and claim 1)

- Obtain a marked final-format document from the computer application, the marked final format document being generated from the marked source document (Figure 6, item 534)
- Obtain logical structure information from the source application (Figure 6, item 534; column 5, lines 28-34; claim 1)
- Creating logical elements in the original final-formatted document using the obtained logical structure information and the marked final-format document (Figure 6, item 530; Figure 7; Figure 3)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 8, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alam as applied to claim 1 above and in further view of Merz (The Structure of PDF, or: whither Acrobat?, 2000 (Date found in "Showtime at the PDF 2000 Conference" and "PDF 2000 Conference") and Adobe Creative Team.

As per dependent claim 8 Alam discloses the limitations similar to those disclosed in claim 1, and the same rejection is incorporated herein. Alam fails to

specifically disclose the method wherein the respective marker attribute value is a color value that is assigned to each respective logical element by coloring the content of each respective logical element. However, Merz discloses identifying logical elements by marking content (page 22) and the Adobe Creative Team teaches the ability to have colored elements and the ability to maintain color attributes from a source document to a converted document (Adobe Acrobat 4.0, Second Edition, Lesson 1, step 6 and Lesson 3, "Converting files to PDF from Microsoft applications (Windows)).

It would have been obvious to one skilled in the art at the time of applicant's invention to have combined Alam's marker attributes with the Merz's suggestion to mark content and Adobe Creative Team's ability to have color from a source document correspond to color in a converted document, since would have allowed a user maintain attribute consistency from the source document to the converted document in order to identify corresponding elements.

As per independent claim 14 Alam discloses a computer-implemented method for converting a source document into a PDF document comprising:

- Obtaining a source document that includes a plurality of logical elements, each having associated content with visual appearance (Figure 6, item 510 and 518)
- Producing a first PDF from a source document using a source computer program application (Figure 6, item 534; column 2, lines 28-36: Here, the input and output document may be a plurality of types, including PDF)
- Identifying logical elements of the source document (column 6, lines 54-61 and claim 1)

- Producing a second PDF document from the source document using the source computer program application (Figure 6, item 626)
- Creating a plurality of logical elements in the first PDF document based on the second PDF document, each logical element corresponding to a logical element in the source document (Figure 6, item 530; Figure 7; Figure 3: Here, the intermediate document serves to create the elements in the first PDF based upon the second PDF)

Alam fails to teach the use of color as a marker attribute value. However, Merz discloses marking content to show logical elements and the Adobe Creative Team teaches that ability to maintain color PDF document (Adobe Acrobat 4.0, Second Edition, Lesson 1, step 6 and Lesson 3, "Converting files to PDF from Microsoft applications (Windows)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use color as a means for marking logical elements, since it would have allowed a user to preserve the separation of different logical elements by applying different colors to each element.

As per independent claim 17 Alam discloses a computer program product stored on a machine-readable medium, comprising instruction operable to cause a program processor to:

- Obtain a source document that includes a plurality of logical elements, each of the plurality of logical elements having associated content with visual appearance (Figure 6, items 510 and 518)

- Producing a first PDF from a source document using a source computer program application (Figure 6, item 534)
- Identifying logical elements of the source document (column 6, lines 54-61 and claim 1)
- Producing a second PDF document containing identified logical elements from the source document (Figure 6, item 626; column 5, lines 28-34; claim 1)
- Creating logical elements in the first PDF document based on the color-coded PDF document with logical elements corresponding to the source document (Figure 6, item 530; Figure 7; Figure 3)

Alam fails to teach the use of color as a marker attribute value. However, Merz discloses marking content to show logical elements and the Adobe Creative Team teaches that ability to maintain color PDF document (Adobe Acrobat 4.0, Second Edition, Lesson 1, step 6 and Lesson 3, "Converting files to PDF from Microsoft applications (Windows)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use color as a means for marking logical elements. Motivation to do so would have been to preserve the separation of different logical elements by applying different colors to each.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alam in further view of Wexler et al. (US 6298357).

As per dependent claim 12 Alam discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Alam fails to disclose the method further comprising using the marker attribute values in the second electronic document to create a hierarchal structure for the plurality of logical elements. However, Wexler discloses using the marker attribute values in the second electronic document to create a hierarchal structure for the plurality of logical elements (Figure 8; column 5, line 66-column 6, line 3).

It would have been obvious to one skilled in the art at the time of applicant's invention to have combined Alam's documents with logical elements with Wexler's hierarchical structure. Motivation to do so would have been to allow for the document to be rearranged or grouped based upon similar logical elements (Wexler: column 2, lines 23-25).

As per dependent claim 13 Alam and Wexler disclose the limitations similar to those in claim 12, and the same rejection is incorporated herein. Wexler further discloses obtaining structural information from the first electronic document to create a hierarchal structure for the plurality of logical elements in the second electronic document (Figure 2; column 3, lines 39-46).

It would have been obvious to one skilled in the art at the time of applicant's invention to have combined Alam and Wexler's use of a document with hierarchical structure with Wexler's further use of a source document to create a hierarchical structure. Motivation to do so would have been to allow for the document to be

rearranged or grouped based upon similar logical elements in both documents (Wexler: column 2, lines23-25).

Allowable Subject Matter

8. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

9. Applicant's arguments with respect to claims 1 and 4-18 have been considered but are moot in view of the new ground(s) of rejection.

As detailed above, the Alam, Adobe Creative Team and Wexler references have been reapplied pointing to different portions of the art in order to meet the limitations of the applicant's amendments to claims 1, 4-7, 9-13, 15-16, and 18. Further, the Mertz reference has been added to address the amended features of claims 8, 14, and 17.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (703) 308-5465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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